

**FINANCIAL PERFORMANCE OF SELECTED PUBLIC AND PRIVATE SECTOR BANKS BASED ON
CAMEL MODEL WITH REFERENCE TO INDIAN BANKING SECTOR**

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ABSTRACT

The Banking sector is the backbone of the Indian economy and it helps to the growth and development of the country. This paper analysis at the financial soundness of selective public sector banks under globally accepted CAMEL framework. This paper observes the behavior of various parameters of CAMEL approach model and their ability over the study period. The financial analysis finds the overall soundness of selective public sector banks with certain five parameters .present study analyzes the performance of two private sector and two public sector banks for the period 2012-2016 using CAMEL model. The research aims to evaluate Capital adequacy, Asset quality, Management, Earnings and Liquidity parameters for the sake of understanding of soundness of banks. The application of CAMEL approach to both private and public sector bank for the period 2012 to 2016 allows us to out the performance of banks. We use debt equity ratio for the analyze of capital adequacy parameter, loan loss provisions to total loans for the analyze of assets quality parameter, return on equity for analyzing management quality side, return on assets to analyze earnings parameter and deposits on total assets ratios to analyze liquidity capability.

Keywords: Camel Model, Banks Performance, Bank Soundness, Liquidity.

BANKING IN INDIA -INTRODUCTION:

Banking in India was originated from the last decades of the 18th century. The prime banks are Bank of Hindustan (1770-1829) and The General Bank of India, established 1786. The largest bank, and the oldest one since in existence, is the State Bank of India, which originated in the Bank of Calcutta in June 1806, which is collectively the Bank of Bengal. Typically this was one of the three presidency banks, the remaining two are being the Bank of Bombay and the Bank of Madras, all three of which were established under charters from the British government East India Company. Those three banks merged in 1921 to form the Imperial Bank of India, which, after the India's independence, became the State Bank of India in 1955. For many years these banks acted as quasi-central banks just following, as did their successors, until the Reserve Bank of India was established in 1935. In 1969 the Indian government nationalized all the major banks and these have remained under government ownership. Every bank maintained under a structure known as 'profit-making public sector undertaking' (PSU) and those are commercialized are allowed to compete and operate as commercial banks. The Indian banking sector is made up of 4 types of banks, as well as the PSUs and the state banks; they have been joined since the 1990s. After that many new private commercial banks and a number of foreign banks.

OBJECTIVES

The objectives of our study are:

- To know the financial situation and analysis of TWO PUBLIC and TWO PRIVATE sector bank using CAMEL approach.
- To give recommendations and suggestions for improvement of performance and financial position of four private and public sector banks.

1. CAPITAL ADEQUACY

CAPITAL ADEQUACY RATIO

The capital adequacy ratio is popular to maintain that banks to maintain a reasonable level of losses arising from regular operational losses. The higher the capital adequacy ratio indicates stronger the bank and the more will be the protection of investors. The banks have to maintain at least 9% capital adequacy ratio as regulations of RBI. CAR can be calculated by combining tier 1 and tier 2 capitals and it is divided by risk of weighted assets.

BANK	2016	2015	2014	2013	Avg	Rank
SBI	11.34	12.16	11.94	12.86	12.07	4
BOB	10.78	11.85	13.32	14.55	12.62	3
ICICI	17.78	16.59	17.55	18.46	17.56	1
AXIS	15.09	15.90	18.64	17.25	16.72	2

SOURCE: SBI, BOB, ICICI, AXIS DOMAINS.

As per the results of above table, we know that ICICI bank has highest CAR value (17.56), axis bank (16.72) Followed by BOB (12.62) and SBI (12.07).

ADVANCES TO ASSET RATIO:

It is a ratio which shows the relationship in between advances and assets of that bank. The ratio depicts a bank's fastness in lending. That activity which ultimately effects profitability of that bank. Preferably higher ratio is suggestible.

BANK	2016	2015	2014	2013	Avg	Rank
SBI	66.27	64.49	64.19	62.19	64.28	1
BOB	62.91	64.44	63.17	61.98	63.12	2
ICICI	53.15	50.12	49.75	51.21	51.05	4
AXIS	64.95	61.25	59.70	58.36	61.06	3

SOURCE: SBI, BOB, ICICI, AXIS DOMAINS.

As per the results of above table, we know that SBI bank has highest ATA value (64.28), BOB bank (63.12) Followed by AXIS (61.06) and ICICI (51.05).

DEBT EQUITY RATIO

It's a ratio that shows the degree of leverage of a banking institution. It shows how much portion of the banking business is financed through equity and how much through debt. It is calculated by dividing total borrowings with shareholder net worth. Higher ratio indicates lower performance and lower ratio will gives good performance for the, share holder

BANK	2016	2015	2014	2013	Avg	Rank
SBI	1.48	1.38	1.42	1.41	1.42	1
BOB	1.56	1.48	1.72	1.65	1.60	3
ICICI	2.30	2.29	2.18	2.26	2.25	4
AXIS	1.52	1.78	1.65	1.42	1.59	2

SOURCE: SBI, BOB, ICICI, AXIS DOMAINS.

From the above table, from the above table, **SBI** has the highest performance with lowest value of (1.42) and **ICICI** bank is the least performer. With a highest average value of (2.25)

COMPOSITE -CAPITAL ADEQUACY:

BANK	CAR		DEBT-EQUIY		ADVANCE TO ASSETS		GROUP RANK	
	VAL	RANK	VAL	RANK	VAL	RANK	AVG	RANK
SBI	12.07	4	1.42	1	64.28	1	25.92	3
BOB	12.62	3	1.60	3	63.12	2	25.78	2
ICICI	17.56	1	2.25	4	51.05	4	23.62	1
AXIS	16.72	2	1.59	2	61.06	3	26.45	4

On the ground of group averages of the above three averages CAR, DEBT- EQUITY, ADVANCES TO ASSET, **ICICI** was at the top position with group average of (2.362), followed by **BOB** (2.578), **SBI** (2.592).and axis was the last with the score of (2.645) scored the last place due to its poor performance in Debt-Equity, as well as Advances to Assets ratio, and as well as Government Securities to Total Investment ratios.

2. ASSETS QUALITY

The assets quality is also an important parameter to examine the financial strength of any bank. The main objective to calculate the assets quality is to measure the composition of non-performing assets (NPA) in particular percentage of the total assets of that bank.

NPA TO ADVANCES

It is the first important standard to finalize the assets quality, calculating the net nonperforming assets as to a percentage in net advances. Therefore Net NPA= Gross NPA - Net of provisions on NPA – interest.

BANK	2016	2015	2014	2013	Avg	RANK
SBI	2.25	1.95	1.80	1.65	1.91	3
BOB	2.1	2.2	2.4	1.95	2.16	4
ICICI	0.95	0.85	1.0	1.19	0.99	2
AXIS	0.42	0.70	0.85	0.70	0.63	1

SOURCE: SBI, BOB, ICICI, AXIS DOMAINS.

From the above table, **AXIS** is on the top level with least average value of 0.63 followed by **ICICI** (0.99) and **SBI** (1.91) on next positions respectively. **BOB** scored the least position with highest percentage value of 2.16.

TOTAL INVESTMENTS TO TOTAL ASSETS

This ratio shows the level of deployment of assets as in investment in external source which is as against advances. That ratio is also used as a tool to find out the percentage of total assets stuck up as investments. If the higher ratio indicates the conservative policy of that particular bank to facilitate a defense as against non-performing assets in that financial institution.

BANK	2016	2015	2014	2013	AVG	RANK
SBI	23.78	23.59	24.89	26.32	24.64	1
BOB	24.55	23.9	24.87	26.32	24.91	2
ICICI	33.69	36.98	37.54	38.54	36.68	4
AXIS	23.45	26.54	27.95	25.65	25.89	3

SOURCE: SBI, BOB, ICICI, AXIS DOMAINS.

From the above table, we came into conclusion that **SBI** is on the top position with least average of 24.64 followed by **BOB** (24.91) and **axis** (25.89) and **ICICI** scored least rank with highest score of 36.68
NET NPA TO TOTAL ASSETS

This ratio represents the level of efficiency of bank in the process of finding the credit risk and recovering the debts of that particular financial institution. In this ratio, the Net NPA are calculated as a percentage of Total Assets of that banking company. This ratio which is least indicates the highest performance as well as highest ratio indicates the lowest performance

BANK	2016	2015	2014	2013	AVG	RANK
SBI	0.65	0.70	0.75	0.69	0.69	2
BOB	0.75	0.80	0.70	0.60	0.71	3
ICICI	0.78	0.72	0.69	0.95	0.78	4
AXIS	0.40	0.35	0.25	0.30	0.32	1

SOURCE: SBI, BOB, ICICI, AXIS DOMAINS.

From the above table we can understand that , **AXIS** bank rank top level bank in terms of NPA to total ASSETS are concerned with the least average value of (0.32) and followed by **SBI** and **BOB** and **ICICI** bank is the least rank with highest amount of percentage value of (0.78)

COMPOSITE ASSET QUALITY:

BANK	NPA TO ADVANCES		TOTAL INVESTMENTS TO TOTAL ASSETS		NET NPA TO TOTAL ASSETS		GROUP RANK	
	Per %	Rank	Per %	Rank	Per %	Rank	Avg	Rank
SBI	1.91	3	24.64	1	0.69	2	9.08	2
BOB	2.16	4	24.91	2	0.71	3	9.26	3
ICICI	0.99	2	36.68	4	0.78	4	12.81	4
AXIS	0.63	1	25.89	3	0.32	1	8.94	1

Composite asset quality is the average of three ratios. After the calculation of three ratios averages we came to know that axis bank have highest rank with least percentage or average value of 8.94 and followed by SBI 9.08 and BOB 9.26 and finally with least rank and highest percentage value is ICICI bank with 12.81.

3. MANAGEMENT EFFICIENCY

ADVANCE TO DEPOSIT RATIO

This ratio shows the efficiency as well as capability of the bank's top level management in applying the deposits (which includes receivables) available excluding some funds that is equity capital, etc.

BANK	2016	2015	2014	2013	AVG	RANK
SBI	84.98	86.54	82.26	81.16	84.30	3
BOB	86.15	82.44	89.54	82.31	85.11	2
ICICI	106.5	105.5	101.4	101.3	103.7	1
AXIS	84.98	82.4	82.52	81.25	82.70	4

SOURCE: SBI, BOB, ICICI, AXIS DOMAINS.

As per the above table, **ICICI** is on the top level with highest average value of 103.7 followed by **BOB** 85.11 and **SBI** (84.30) in the next places respectively. **Axis** scored the last place with least percentage of 82.70

PROFIT PER EMPLOYEE

It is calculated by dividing the profit after tax earned by the bank with the total number of employees. The higher the ratio, higher is the efficiency of the management and vice versa.

BANK	2016	2015	2014	2013	AVG	RANK
SBI	8.03	7.03	6.58	5.90	6.88	3
BOB	6.50	5.87	5.02	3.58	5.24	4
ICICI	12.58	12.65	11.25	12.50	12.34	1
AXIS	12.50	11.24	9.46	9.87	10.76	2

SOURCE: SBI, BOB, ICICI, AXIS DOMAINS.

As per the above table, **ICICI BANK** is on the top level with the highest average value of 12.34 followed by **axis** (10.76) and **SBI** (6.88) in the next places respectively. **BOB** scored the last place with least percentage of 5.24.

RETURN ON EQUITY

It is an indicator of the profitability of a bank. In calculation of this ratio, Profit after tax is expressed as a percentage of equity.

BANK	2016	2015	2014	2013	AVG	RANK
SBI	18.18	21.18	19.36	16.98	18.92	2
BOB	23.50	23.45	22.20	20.48	22.40	1
ICICI	9.45	8.45	7.54	6.89	8.08	4
AXIS	14.87	12.65	12.65	9.05	13.16	3

SOURCE: SBI, BOB, ICICI, AXIS DOMAINS.

From the above table **BOB** is on the top level with highest average value of (22.40%) followed by **SBI** (18.92%) and **AXIS** (13.16%) respectively. **ICICI** bank scored the least position.

COMPOSITE MANAGEMENT EFFICIENCY:

BANK	ADVANCE TO DEPOSIT RATIO		PROFIT PER EMPLOYEE		RETURN ON EQUITY		GROUP RANK	
	Per %	Rank	Per %	Rank	Per %	Rank	Avg	Rank
SBI	84.30	3	6.88	3	18.92	2	36.7	3
BOB	85.11	2	5.24	4	22.40	1	37.58	2
ICICI	103.70	1	12.34	1	8.08	4	41.37	1
AXIS	82.70	4	10.76	2	13.16	3	35.54	4

Based on group averages of four ratios, **ICICI** bank was at the first position with group average of 41.37, followed by **BOB** (37.58), **SBI** (36.7) and **AXIS** respectively. **AXIS** scored the lowest position with 4th rank due to its poor performance in total advances to total deposits, profit per employee and business per employee ratios.

4. EARNING QUALITY

OPERATING PROFIT TO TOTAL ASSET

This ratio reflects how much a bank can earn profit from its operations for every rupee invested in its total asset. In this ratio operating profit are expressed as percentage of total assets

BANK	2016	2015	2014	2013	Avg	Rank
SBI	2.15	2.25	3.25	2.25	2.48	4
BOB	2.62	2.58	2.58	2.95	2.68	2
ICICI	2.46	2.56	2.95	2.21	2.55	3
AXIS	3.76	3.56	3.66	3.69	3.67	1

SOURCE: SBI, BOB, ICICI, AXIS DOMAINS.

From the above table **AXIS** is on the top position with highest average of 3.67, **BOB** (2.68), **ICICI** (2.55) and **SBI** (2.48) respectively. **SBI** scored the lowest position with least percentage of 2.48.

NET PROFIT TO TOTAL ASSET

This ratio reflects the return on assets employed or the efficiency in utilization of assets. It is calculated by dividing the net profits with total assets of the bank. Higher the ratio reflects better earning potential of a bank in the future.

BANK	2016	2015	2014	2013	Avg	Rank
SBI	0.68	0.78	0.97	0.83	0.82	3
BOB	0.25	0.28	0.56	0.66	0.44	4
ICICI	1.34	1.68	2.02	1.78	1.71	2
AXIS	1.89	1.96	1.58	1.54	1.74	1

SOURCE: SBI, BOB, ICICI, AXIS DOMAINS.

Here, **AXIS** is on the top position with highest average of 1.74, **ICICI** (1.71) and **SBI**(0.82) and **BOB** (0.44). **BOB** scored the lowest position with least ratio of 0.44

INTEREST INCOME TO TOTAL INCOME

Interest income is considered as prime source of revenue for banks. The interest income to total income reflects the capability of the bank in generating income from its lending business.

BANK	2016	2015	2014	2013	Avg	Rank
SBI	83.13	83.89	87.13	81.56	83.93	3
BOB	98.47	92.59	90.41	92.11	92.13	1
ICICI	61.23	60.95	58.00	49.84	57.26	4
AXIS	84.68	89.41	86.81	89.28	87.55	2

SOURCE: SBI, BOB, ICICI, AXIS DOMAINS

From this table, **BOB** is on the top place with highest average of 92.13, **AXIS** (87.55), **SBI** (83.93) and **ICICI** (57.26). **ICICI** scored the lowest position with least ratio of 57.26.

COMPOSITE EARNING QUALITY

BANK	OPERATING PROFIT TO TOTAL ASSET		NET PROFIT TO TOTAL ASSET		INTEREST INCOME TO TOTAL INCOME		GROUP RANK	
	Per %	Rank	TIMES	Rank	Per %	Rank	Avg	Rank
SBI	2.48	4	0.82	3	83.93	3	2.90	3
BOB	2.68	2	0.44	4	92.13	1	3.17	1
ICICI	2.55	3	1.71	2	57.26	4	2.05	4
AXIS	3.67	1	1.74	1	87.55	2	3.09	2

From the group averages of four ratios of quality of earning as showed in above , **BOB** was at the top place with total group average of 4, **AXIS** and **SBI** with an average of (3.09) and (2.90) .**ICICI** scored the lowest place with 2.05 because of its poor performance.

5. LIQUIDITY

LIQUIDITY ASSET TO TOTAL ASSET:

The liquidity position of the bank is measured by this ratio. It includes money at call and short notice, cash in hand, balance with Reserve bank of India and balance with banks (India and Abroad). The revaluation of all the assets is included in total assets.

BANK	2016	2015	2014	2013	AVG	RANK
SBI	4.96	4.95	5.72	7.35	5.745	1
BOB	2.37	2.00	3.25	6.28	3.475	4
ICICI	3.32	3.35	3.65	4.79	3.778	3
AXIS	6.24	1.00	5.00	9.86	5.525	2

SOURCE: SBI, BOB, ICICI, AXIS DOMAINS

From the above table, **SBI** is on the top place with highest average of 5.745 followed by **AXIS** (5.525) and **ICICI** (3.778) on second and third positions respectively. **BOB** scored the last place with least percentage of 3.475

LIQUIDITY ASSET TO TOTAL DEPOSITS:

The liquidity available to the depositors of a bank is measured by using this ratio. It can be calculated by dividing the liquid assets with total deposits.

BANK	2016	2015	2014	2013	AVG	RANK
SBI	11.77	13.02	11.22	19.75	13.94	3
BOB	10.00	12.97	12.32	15.24	12.63	4
ICICI	13.58	23.24	22.31	22.36	20.37	1
AXIS	14.52	19.32	12.75	19.75	16.59	2

SOURCE: SBI, BOB, ICICI, AXIS DOMAINS

In the table **ICICI** is on the top place with highest average of 20.37 followed by **AXIS** (16.59) and **SBI** (13.94) respectively. **BOB** scored the least place with lowest ratio of 12.63 In the table **ICICI** is on the top place with highest average of 20.37 followed by **AXIS** (16.59) and **SBI** (13.94) respectively. **BOB** scored the least place with lowest ratio of 12.63

LIQUIDITY ASSET TO DEMAND DEPOSIT:

It reflects the ability of bank to honor the demand from depositors during a particular year. Bank has to invest these funds in highly liquid form in order to provide higher liquidity for depositors. It can be calculated by dividing the liquid assets with total demand deposits.

BANK	2016	2015	2014	2013	AVG	RANK
SBI	169.54	143.25	155.06	120.95	147.2	3
BOB	200.00	183.98	180.00	145.52	177.38	1
ICICI	195.32	184.78	155.68	149.95	171.42	2
AXIS	96.32	80.00	74.45	60.00	77.69	4

SOURCE: SBI, BOB, ICICI, AXIS DOMAINS

In table, **BOB** is on the top place with highest average of 177.38 followed by **ICICI** (171.42) and **SBI** (147.2) respectively. **AXIS** scored the least place with lowest ratio of 77.69.

COMPOSITE LIQUIDITY:

BANK	LIQUIDITY ASSETTO-TOTAL ASSET		LIQUIDITY ASSETTO-TOTAL DEPOSITS		LIQUIDITY ASSETTO DEMAND DEPOSITS		GROUP RANK	
	Per %	Rank	DEPOSITS	Rank	Per %	Rank	Avg	Rank
SBI	5.74	1	13.94	3	147.2	3	55.63	2
BOB	3.47	4	12.63	4	177.38	1	64.49	3
ICICI	3.77	3	20.37	1	171.42	2	65.19	4
AXIS	5.52	2	16.59	2	77.69	4	33.27	1

From the above group averages of four ratios of liquidity as expressed in the table, **ICICI** was at the top place with group average of 33.27, followed by **SBI** with average of (55.63) and **BOB** (64.49) respectively. **AXIS** is in the least place with 4th rank due to its poor performance in Liquid Assets to Demand deposits, Liquid Assets to Total Assets and Liquid Assets to Total Deposits ratios.

CONCLUSION

Our study concluded that in terms of Capital adequacy ratio parameter **AXIS** and **SBI** were at the top position, while **ICICI** got least rank. The possible reason for this was the poor performance of **ICICI** in debt-equity, advances to assets and government securities to total Investments ratios. In terms of Asset quality parameter, **ICICI** held the top rank while **AXIS** held the least rank. The possible reason for this was the poor performance of **AXIS** in total investments to total assets and net NPAs to total assets and percentage change in NPA ratios. Under Management efficiency parameter it is observed that top rank taken by **ICICI** and least rank taken by **AXIS**. The possible reason for this was the poor performance of **AXIS** in total advances to total deposits, business per employee, and return on equity ratios. In terms of Earning quality parameter the capability of **BOB** got the top rank in the while **ICICI** was at the least place. The possible reason for this was the poor performance of **ICICI** in operating profit to total assets, net profit to total assets and net interest. Margin to total assets ratios. Under the Liquidity parameter **ICICI** stood on the top place and **AXIS** was on the least place. The possible reason for this was the poor performance of **SBI** in liquid assets to total deposits and liquid assets to demand deposits and Approved securities to Total Assets ratios. The present study also shows that though ranking of ratios is different for different banks in selected private and public sector banks. But there is no statistically significant difference between the CAMEL ratios. It signifies that the overall performance of selected private and public sector banks; this is because of adopting modern technology, recovery mechanism and banking reforms. **ICICI** needs to improve its position with regard to asset quality and capital adequacy, **SBI** should improve its liquidity and **BOB** should improve its earning quality.

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